

Claims

1. A lithium battery having a power-generating element comprising at least a positive electrode, a negative electrode and a separator wherein a gel electrolyte comprising at least a polymer and a liquid electrolyte is used in at least a part of said power-generating element, characterized in that the concentration of lithium salt in said liquid electrolyte is from 1.5 to 5 mols per l of the liquid electrolyte.
2. The lithium battery claimed in Claim 1, wherein the weight fraction of the polymer constituting said gel electrolyte comprising at least a polymer and a liquid electrolyte is from 5 to 30% by weight based on the sum of the weight of said polymer and said liquid electrolyte.
3. The lithium battery claimed in Claim 1 or 2, wherein said gel electrolyte is obtained by hardening a mixture of a liquid electrolyte and a monomer having at least two polymerizable functional groups in its molecular chain.
4. The lithium battery claimed in any one of Claims 1 to 3, wherein said lithium salt is LiBF_4 .
5. The lithium battery claimed in any one of Claims 1 to 4, wherein the organic solvent constituting said liquid electrolyte contains γ -butyrolactone in an amount of not smaller than 50% by weight.

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